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Supervisory Examiner: John W. Miller

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Date: June 1, 2005

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(Printed Name of Depositor)June 1, 2005  
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Attention: Mail Stop Appeal Briefs - Patents

Attorney Docket No. PD-990142

Please find attached Re: 09/590,417

Filed on: June 8, 2000

- TRANSMITTAL LETTER FOR APPEAL BRIEF (1 page in duplicate)
- APPEAL BRIEF (37 pages)

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CUSTOMER NO.: 020991

**PATENT**  
Docket No. PD-890142**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Arthur R. Tilford

Date: June 1, 2005

Serial No.: 09/590,417

Group Art Unit: 2614

Filed: June 8, 2000

For: METHOD AND APPARATUS FOR TRANSMITTING,  
RECEIVING AND UTILIZING AUDIO/VISUAL  
SIGNALS AND OTHER INFORMATION

Examiner: Scott E. Beliveau

**APPEAL BRIEF**  
**TRANSMITTAL LETTER**Mail Stop Appeal Briefs - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is the Appeal Brief for the above-identified patent application.

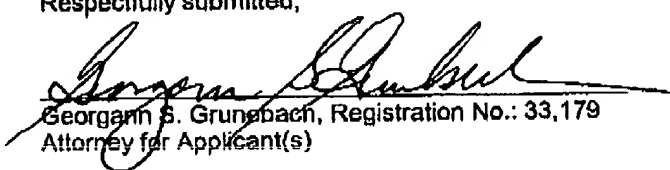
X Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

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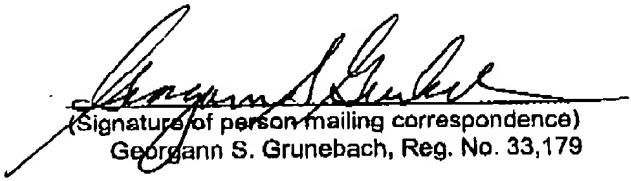
X The total fee due is \$500.00. Please charge this amount to Deposit Account No. 50-0383 of The DIRECTV Group, Inc. (formally Hughes Electronics Corporation), El Segundo, California. If any additional appeal brief fee or extension fee is required, please charge to Deposit Account No. 50-0383.

This letter is submitted in duplicate.

Respectfully submitted,

  
Georgann S. Grunebach, Registration No.: 33,179  
Attorney for Applicant(s)**CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8**

I hereby certify that this correspondence is being facsimile transmitted to (703) 872-9306, addressed to Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 1, 2005, by Georgann S. Grunebach.

**CUSTOMER NUMBER 020991**The DIRECTV Group, Inc.  
Patent Docket Administration  
Bldg. 001, M/S A109  
PO Box 956  
El Segundo, CA 90245-0956  
Telephone: (310) 964-4615  
(Signature of person mailing correspondence)  
Georgann S. Grunebach, Reg. No. 33,179June 1, 2005

(Date of Signature)

Date: June 1, 2005

CUSTOMER NO.: 020991

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Docket No. PD-890142**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Arthur R. Tilford

Date: June 1, 2005

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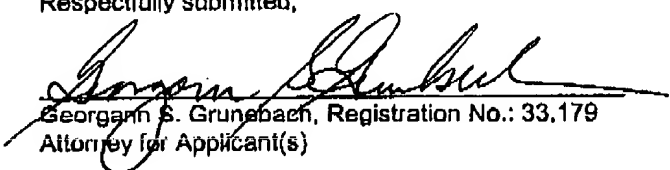
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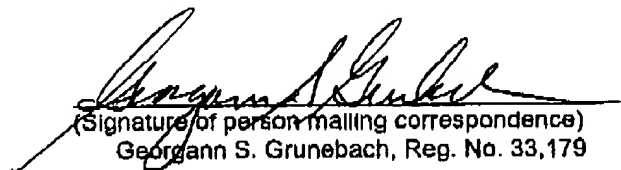
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This letter is submitted in duplicate.

Respectfully submitted,

  
Georgann S. Grunebach, Registration No.: 33,179  
Attorney for Applicant(s)**CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8**

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Georgann S. Grunebach, Reg. No. 33,179June 1, 2005  
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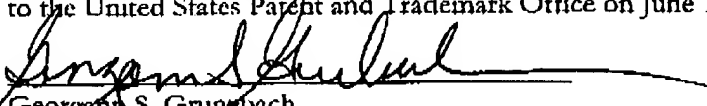
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Georgann S. Grunebach  
Reg. No. 33,179

Telephone No. (310) 964-4615

Due Date: June 6, 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

Inventor: Arthur R. Tilford

Serial #: 09/590,417

Filed: June 8, 2000

Title: METHOD AND APPARATUS FOR TRANSMITTING,  
RECEIVING AND UTILIZING AUDIO/VISUAL SIGNALS  
AND OTHER INFORMATION

Examiner: Scott E. Beliveau

Group Art Unit: 2614

Appeal No.: \_\_\_\_\_

**BRIEF OF APPELLANTS**

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §41.37, Appellants hereby submit the Appellants' Brief on Appeal from the final rejection in the above-identified application, as set forth in the Office Action dated February 7, 2005.

Please charge the amount of \$500.00 to cover the required fee for filing this Appeal Brief as set forth under 37 CFR §41.37(a)(2) and 37 CFR §41.20(b)(2) to Deposit Account No. 50-0383 of The DIRECTV Group, Inc. (formerly Hughes Electronics Corporation), El Segundo, California. Also, please charge any additional fees or credit any overpayments to Deposit Account No. 50-0383.

I. REAL PARTY IN INTEREST

The real party in interest is Hughes Electronics Corporation, the assignee of the present application.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

III. STATUS OF CLAIMS

Claims 1-34 were cancelled.

Claims 35-68 are pending in the application.

Claims 35-68 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Perlman, U.S. Patent No. 6,169,879, in view of the PocketTV™ article, and in further view of Huang et al., U.S. Patent No. 6,437,836 (Huang).

Claims 35-68 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Schindler et al. (US Pat No. 5,675,390), in view of the PocketTV™ article, and further in view of Huang et al., U.S. Patent No. 6,437,836 (Huang).

All of the rejections are being appealed.

IV. STATUS OF AMENDMENTS

No amendments to the claims have been made subsequent to the final Office Action.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

Audio/visual programs such as movies and television programs are often broadcast to homes and businesses for viewing (see page 2, lines 25-27). However, the storage of the information is problematic. First, the material may be protected. Thus, it must be stored in encrypted form. VCRs may also be used to record the information on video tapes. However, video tapes are bulky and must be placed into a compatible format VCR (that is connected to a television) for viewing (see page 2, line 30-page 3, line 12).

The present invention is directed towards overcoming prior art difficulties related to the viewing of audio/visual information. Specifically, the invention is directed towards capturing and viewing such information using a handheld computing device (see page 1, lines 20-22).

Independent claims 35, 47, and 57 provide for displaying audio/visual information on an output device by using a set top box and hand held computing device (see page 1, lines 20-22). The handheld computing device is used to control the set top box (similar to a remote control) and store audio/visual information (page 5, lines 2-5). The claims provide the ability for the handheld computing device to receive and store audio/visual information from the set top box (see page 5, lines 2-5) and then transmit the audio/visual information to the same (or different) set top box for display of the transmitted information on the output device (see FIG. 1, FIG. 2, FIG. 4, page 14, lines 24-30, page 13, lines 14-27, page 12, lines 8-12). It should also be noted that the claims specifically provide that the handheld computing device is configured to transmit the same material that is received (from a set top box) and stored on the device to a set top box for display. Similarly, the claims provide that the set top boxes (STB) are configured to receive two types of audio/visual information: (1) broadcast audio/visual information; and (2) audio/visual information that has been transmitted by a hand held computing device (see page 14, lines 16-28). The claims also provide that the STB is configured to transform the audio/visual information received from the hand held computing device into a suitable form and then display the information on an output device (see page 8, lines 1-7; page 12, line 15-page 13, line 4; page 13, line 28-page 14, line 9; and page 14, line 29-page 15, line 4).

The independent claims provide for two or more STBs. The hand held computing device receives the audio/visual information from a first STB and transmits the audio/visual information

to a second STB (which displays the information on an output device) (see FIG. 1, FIG. 2, FIG. 4, page 14, lines 24-30, page 13, lines 14-27, page 12, lines 8-12).

Dependent claims 36 and 58 specify that the first and second STBs are the same (see FIG. 1, FIG. 2, FIG. 4, page 14, lines 24-30, page 13, lines 14-27, page 12, lines 8-12).

Dependent claims 37 and 59 specify that the first and second STBs are different STBs (see FIG. 1, FIG. 2, FIG. 4, page 14, lines 24-30, page 13, lines 14-27, page 12, lines 8-12).

Dependent claim 48 depends on independent claim 47 (that claims a STB) and indicates that there are at least two hand held computing devices. In other words, the STB of the independent claim receives audio/visual information from a first hand held computing device and then transmits the received information to a different second hand held computing device (see FIG. 1, FIG. 2, FIG. 4, page 14, lines 24-30, page 13, lines 14-27, page 12, lines 8-12).

The independent claims also provide for a user command that is received (from a user) into a handheld computing device (see page 7, lines 11-18). Dependent claims 38, 49, and 60 further elaborate on the user commands. Specifically, the claims provide that the user command comprises a depression of a single button on the hand held computing device that causes the audio/visual information to be transmitted from the device to the STB and the STB to then playback the audio/visual information on the output device (see page 13, lines 14-22; page 14, line 24-page 15, line 4).

Dependent claims 39 and 61 provide that the audio/visual information is stored on the hand held computing device in encrypted form (see page 11, lines 20-page 12, line 24).

Dependent claims 40, 50, and 62 provide that the handheld computing devices communicate with the STBs via wireless transmission (see page 5, lines 1-5; page 8, lines 12-23; page 12, lines 25-26).

Dependent claims 42, 52, and 64 provide for a VCR that is incorporated into an STB. Further, the claims provide that the hand held computing device is configured to control such a VCR (see page 11, lines 5-11).

Dependent claims 43, 53, and 65 provide that the STB is configured to filter out desirable information from the broadcast audio/visual information for transmission and storage on the hand held computing device (see page 9, lines 10-14; page 12, lines 23-24).

Dependent claims 45, 55, and 67 provide that the audio/visual information is only transmitted from the STB to the hand held computing device when an amount of the audio/visual information exceeds a threshold (see page 9, lines 26-30).

Dependent claims 46, 56, and 68 provide that the audio/visual information is transmitted from the STB to the hand held computing device when requested by the hand held computing device (see page 9, lines 24-26).

#### VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 35-68 stand rejected under 35 U.S.C. § 103(a) as being rendered obvious by Perlman, U.S. Patent No. 6,169,879, in view of the PocketTV™ article, and in further view of Huang, U.S. Patent No. 6,437,836.

Claims 35-68 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schindler et al. (US Pat No. 5,675,390), in view of the PocketTV™ article, and further in view of Huang et al., U.S. Patent No. 6,437,836 (Huang).

These rejections are being appealed.

#### VII. ARGUMENT

##### A. The Independent Claims Are Patentable Over Perlman in view of PocketTV and further in view of Huang

As stated above, independent claims 35, 47, and 57 provide for displaying audio/visual information on an output device by using a set top box and hand held computing device. Specifically, the handheld computing device is used to control the set top box (similar to a remote control) and store audio/visual information. The claims provide the ability for the handheld computing device to receive and store audio/visual information from the set top box and then transmit the audio/visual information to the same (or different) set top box for display of the transmitted information on the output device. None of the prior art references, either alone or in combination, implicitly or explicitly, provide the ability for such a system or hand held computing device that performs such combined functionality as claimed.



The rejection relies on Perlman to teach a WebTV set top box environment. Appellant agrees that Perlman discloses a WebTV box. Perlman also describes a central electronics device 40 (not an STB) that receives cable television signals from a cable provider (see col. 7, lines 66-col. 8, line 4). Perlman further describes that all video, audio, or data signals must pass through central electronics device 40 when it is transmitted between cable box 122, VCR 130, television set 110, consumer electronics devices 106 and 108, and cable jack 124.

As admitted in the Office Action, Perlman completely fails to describe the following claimed limitations:

- (1) transmitting audio/visual information to a handheld computing device;
- (2) receiving audio/visual information from a handheld computing device;
- (3) transforming the audio/visual information received from the handheld computing device to a form suitable for presentation on an output device; and
- (4) causing the transformed information (that was received from the handheld computing device) to be displayed on an output device.

*PocketTV's Teaching is limited to Playback on the Handheld Device Itself*

To teach various claim elements, the Office Action relies on the PocketTV article.

However, Appellant submits that the Office Action completely misinterprets the language of the PocketTV article and construes it in an improper manner. The PocketTV article completely fails to teach the transmission of audio/visual information to a set top box for display on an output device. Instead, the PocketTV article is limited in that it merely describes the playback of an MPEG clip on the handheld device itself. In this regard, there is no description whatsoever for receiving the MPEG clip or transmitting the MPEG clip. Nor is there any description of receiving the MPEG clip or transmitting of an MPEG clip to a set top box (as claimed).

The final Office Action asserts that "The PocketTV reference teaches that a palm-sized PC or PDA that 'becomes a miniature VCR'". As set forth in more detail below, Appellants respectfully traverse such an assertion. The PocketTV article is merely a press release from a company that is touting their device. The press release merely advertises that your handheld or palm-size PC becomes a miniature VCR. Again, there is no functional or enabling description that supports such

an assertion in the press release. Instead, the press release consistently asserts that the handheld or palm-size PC merely has the capability to play movie files encoded in the standard MPEG-1 format. In fact, the article places the reference to the miniature "VCR" in quotes as a statement by Tristan Savatier, President of MpegTV. Such a quote is not even remotely equivalent to an enabling disclosure or the teaching of the present invention. In addition, Appellant submits that the PocketTV article does not merely reduce the size of Perlman's VCR. Instead, PocketTV presents a device that merely has one feature of a VCR – the ability to playback a video on the device itself. For the Patent Office to assert that an obviously marketing "fluff" article teaches a detailed claim step is wholly without merit.

On its face, the PocketTV reference completely fails to teach various VCR aspects. Using the logic of the final Office Action, since PocketTV teaches a miniature VCR, the PocketTV article could be used to teach all aspects of a VCR including timed programming, one touch recording, channel selection, various menu options, etc. Such an assertion is illogical. In this regard, the mere mention that a palm-size PC becomes a miniature VCR does not teach anything about the functions of the palm-size PC at all. Instead, one must read the context and remainder of the reference to determine what properties of the "VCR" are present. An examination of the PocketTV reference reveals a complete lack of teaching of the ability for the palm-size PC to store information and then transmit such information to a set top box for display on a display device as claimed. Instead, as stated above, the PocketTV reference restricts the display of information to the palm-size PC itself.

In addition, under MPEP §2121, the prior art relied upon to reject a claim must be an enabling disclosure. The MPEP provides that "mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation. *Elan Pharm., Inc. v. Mayo Foundation for Medical and Education Research*, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003)". Appellants submit that the PocketTV article is not an enabling disclosure. Instead, to teach the VCR aspects for which it is asserted (namely the ability to store and then transmit the information to a set top box for display on a display device), undue experimentation would be required. Accordingly, the PocketTV reference cannot be used as part of establishing a prima facie case of nonobviousness for the present invention.

In response to some of the above arguments, the final Office Action states:

The PocketTV reference teaches that palm-sized PC or PDA that "becomes a miniature VCR". The Perlman reference teaches the interconnection of a "set top box" [40] with any consumer electronic device and the ability to transfer video to/from those devices such as a VCR. The Huang reference discloses the particular usage of a PDA as a remote controller. Taking the first two references in combination, provides a VCR/PDA that interconnects with and transfers A/V information to/from the set-top-box similar to a traditional VCR but with the advantage of being both portable. Furthermore, the particular interconnection of a PDA to the set-top box advantageously enables the stored information viewed on a larger screen in view of the Perlman reference. The particular usage of a PDA interconnected to a set-top-box was clearly envisioned by those skilled in the art as evidenced by the art of record and the common usage motivation of interconnecting a PDA to a set-top box so as to facilitate the viewing of stored information from the portable small screen PDA on a larger screen was clearly recognized as set forth in the Final Rejection of 27 September 2004.

Appellants respectfully traverse the above assertions. As stated above, the PocketTV reference cannot be used to teach the functionality of a VCR that is portable as asserted. Accordingly, the combination of Perlman with PocketTV does not and cannot teach a VCR/PDA combination that transfers A/V information to/from a set-top box similar to a tradition VCR but with the advantage of being portable. Such an assertion is conclusory and lacks foundation in the cited art. Again, a "fluff" article cannot be used to teach the detailed limitations set forth in the claims. Further, there is no language in the PocketTV article that provides for a VCR/PDA combination that transfers information to/from a set-top-box. Appellants also assert that contrary to that stated in the final Office Action, a traditional function of a VCR is not to transmit information to a set-top box. Instead, a VCR is traditionally used to record information from a set-top box and then to play back the information directly to the television. Traditionally, there is no reason to transmit information to a set-top box. Instead, "traditionally", a VCR is placed between a set-top box and a television and the connection is one way – from the STB to the VCR to the television and not vice versa. Thus, the assertion in the final Office Action misconstrues "traditional" VCR functionality as is well-known in the art.

With respect to Appellants arguments relating to an enabling disclosure of the PocketTV article, the final Office Action responds to prior arguments regarding an enabling disclosure as follows:

As to the assertion that the PocketTV™ device disclosed in the article is somehow non-enabling, the examiner respectfully disagrees with the applicant's opinion. There is no evidence that the device is not enabled, nor is one required in a press release. Additionally, there is no evidence as to why the makers of the PocketTV™ would explicitly equate the device with a VCR if such were not the case or why the makers of the device would promote a product that doesn't work as advertised.

Furthermore, the device is clearly capable of recording MPEG video or else it would not be able to play the stored media back as described in the article.

Appellants respectfully traverse these assertions. The final Office Action admits that the article is a press release. In this regard, press releases are commonly known to contain fluff and puffery regarding a product. In addition, while a press-release does not need to be enabling for the public, the MPEP requires a reference used to reject a claim to be enabling (see MPEP 2121). Should the Patent Office desire to present a detailed white paper of the PocketTV product that has an appropriate date of publication and that clearly illustrates the various claim limitations, then Appellants would have to overcome such a reference. However, such a detailed publication has not been used to reject the claims. Instead, the final Office Action relies on a mere press release that clearly contains puffery. Regarding the suggestion by the Patent Office that there is no "evidence" as to why the makers of PocketTV would explicitly equate the device with a VCR if such were not the case, Appellants submit that there is no requirement that Appellants submit such "evidence". Again, the reference must be an enabling disclosure and there are no details in the PocketTV article that teach or suggest the claim limitations.

The article does state that the device is capable of recording MPEG video as asserted in the final Office Action. However, what is notoriously absent from the article is the capability to transmit the stored information back to a STB for display on a television or other output device. Instead, as stated above, the article is limited to the playback of the information on the device itself. Such a statement again provides that the video can be stored and viewed on the device. But there is no description, implicit or explicit regarding any use or connection of the PDA with an output device, a television, a set-top-box, or the display of stored content on any device other than the PDA itself. The article also refers to various future capabilities and specifically states that "as soon as wireless streaming reaches 100 Mbit/sec or higher bitrate...PocketTV will bring streaming video directly to your Pocket". Such a statement indicates a lack of development of the device with certain capabilities available in the future. The above described various aspects of the PocketTV article clearly establishes the differences between the cited art and the present claims.

The PocketTV article does state that the device may be an HP Jornada 430se device. In this regard, the final Office Action relies on the HP Jornada User's Guide to teach the transmission and reception of video files from/to a computer. However, the User Guide describes the ability to

“send and receive files by infrared beam between P/PCs, between the P/PC and a handheld PC (H/PC), or between the P/PC and a desktop PC.” (see page 8, item 3). In other words, the HP Jornada device is configured to receive files from and transmit files to a personal computer (PC). Such files could include the MPEG files described in the PocketTV article.

In view of the above, there is obviously a clear problem with the combination of the HP Jornada User Guide and the PocketTV article with respect to the present invention— they fail to teach any communication whatsoever with a STB as set forth in the claims. In fact, Appellant submits that there would be no reason at all for the PocketTV device to be used with an STB. Nor could the PocketTV device be used with an STB. In this regard, the PocketTV device requires MPEG files that are encoded by a PC. Such limitations do not exist in the present claims. In addition, the sole purpose of the PocketTV device is that it provides an “MPEG movie viewer for Windows-CE Palm size and Handheld PCs” (see first paragraph of PocketTV article). Thus, the PocketTV’s stated purpose is to view movies on a handheld device. It is not intended to transmit files to an STB for viewing on a display device or a television. Nor does PocketTV describe the transmission of an MPEG file to a computer or STB for viewing on another device. In fact, there would be no reason for a PocketTV user to do transmit files back to a computer — instead, PocketTV is limited by its own description to viewing movies on the device itself.

In addition to the above, Appellant submits that while the PocketTV article can be combined with the HP Jornada User Guide, there is no suggestion, motivation, or rationale for using either the PocketTV article or HP Jornada User Guide with the Perlman device. In fact, the Office Action admits that Perlman fails to describe a handheld computing device as part of its description (see page 12 of final Office Action). Further, Perlman’s description solely refers to and is limited to consumer electronic devices that are included in a home entertainment or information retrieval system (see col. 6, lines 43-45). Perlman specifically lists large standard entertainment unit systems such as cable boxes, satellite receivers, video cassette recorders, video game consoles, video disk players, home theater equipment, home stereo equipment, etc. (see col. 6, lines 45-54). However, notoriously absent from any the entire description of Perlman is a handheld device as claimed. Further, notoriously absent from both the PocketTV article and the User Guide is any reference whatsoever to a connection with anything other than a computer.

Despite the lack of any motivation to combine, the Office Action merely transitions to the description of the PocketTV article after describing the Perlman reference and then concludes that it would be obvious to combine the references. Appellant respectfully disagrees with such an obviousness determination. There is no suggestion or indication, implicit or explicit, in either Perlman, PocketTV, or HP User Guide that the references should be combined with each other. The Office Action rationale provides that the combination would be for the purpose of enabling the recording/storage of audio/visual information on a portable device that may advantageously allow for the storage of an entire movie in your pocket. However, even without Perlman, the PocketTV article meets this "advantage". Accordingly, the combination is not even remotely suggested. In fact, Appellant submits that since the sole point of PocketTV is to provide an MPEG viewer in a handheld device, PocketTV teaches away from transmitting such material to any Perlman device. Further, Perlman does not even remotely suggest the use of a handheld device or portable device whatsoever that may be linked with its system.

The Response to Argument section of a prior Office Action asserts that the HP Jornada PDA "supports the transfer of video files both to and from the device". Appellant respectfully disagrees. There is no description of the transfer of any video files both to and from a "device". Instead, as described above, it is limited to transmission from a PC and not a "set top box" as claimed. There are significant differences that are well established between an STB and a standard PC. Set top boxes are a term of art with specific functionality that are clearly distinguishable from a standard PC that is described in the HP User Guide. In this regard, contrary to that asserted in the Office Action, the HP Jornada does not meet the definition as set forth in Perlman of an "electronic device".

The final Office Action responds to the above arguments as follows:

With respect to applicant's assertion that a WebTV® terminal is not a set top box, as previously addressed in the Advisory Action dated 16 December 2003, the Microsoft Computer Dictionary 5<sup>th</sup> edition, defines a WebTV® as a system with the ability to access the Web as well as send and receive e-mail on a television by means of a set-top box equipped with a modem. Furthermore, it is unclear as to why applicant continues to argue that a WebTV® device is not a "set top box" as referring to any device capable of receiving program information signals (IA: Page 10, Line 23- Page 11, Line 4). A WebTV® device as described by Perlman is capable of receiving program information signals. Accordingly, in light of both the common usage definition of the term of a WebTV® and in light of applicant's specification, it is the examiner's position that the central terminal [40] is reasonably construed as meeting the claimed limitation.

Appellants respectfully traverse the above assertions. Firstly, Appellants do not assert and have not asserted that a WebTV device is not a "set top box". The substance of the above arguments clearly set forth that in the context for which the present invention is used (i.e., for transmitting audio/video content from an STB to a PDA), Perlman's device cannot be used with the HP Jornada device or the PocketTV article. Again, the PocketTV article describes the receipt from a computer of content, the storage of such content on the PDA device, and the ability to playback the content on the PDA device itself. PocketTV does not describe the communication of content from a set top box. Similarly, Perlman's device completely fails to describe any handheld device or use of a handheld device whatsoever. Instead, Perlman describes large entertainment unit systems. In addition and consistent with the definition of a WebTV® device cited by the Examiner, the WebTV® device may access the web and send/receive email. Such a definition does not include the transmission or receipt of content from a handheld computing device. Thus, even using the definition provided by the Examiner, Perlman's device fails to meet the limitations as claimed. The issue is not whether the WebTV® device can receive program information signals, but whether the WebTV® device can receive audio/visual information transmitted from a hand held computing device. Such a teaching is lacking in both Perlman and the PocketTV article.

The final Office Action continues:

With respect to applicant's arguments that the combination of references is inoperative in so far as the PocketTV device is not only incapable of being used with a STB, but is also unable to receive/transmit an MPEG clip to a set top box, the examiner respectfully disagrees. As previously set forth in the Final Rejection of 27 September 2004, the HP Jornada™ 430se inherently supports the transfer of files to/from the PDA as evidenced by the HP User Guide, it is commonly known in the art that VCR-type devices transmit video files for subsequent display as taught by Perlman, and the analogous sharing of video files between VCR users is known in the art as described in applicant's background (IA: Page 2, Lines 3-12). Furthermore, the fact that a WebTV™ is a set top box that is essentially a general purpose computer with a tuner is commonly understood in the art. Accordingly, taken in combination with the Perlman reference, all video signals derived from the PDA of the PocketTV device would be distributed/received through the central electronic device or set-top box [40]. Given that the PDA must first receive an MPEG clip in order play it back and since the STB [40] of Perlman is the central hub of network connectivity and supports communication to the Internet, it is the examiner's position that taken in combination that the claim limitations of receiving/transmitting of an MPEG clip to a set top box is met.

Appellants respectfully traverse the above assertions. Appellants agree that the HP Jornada device supports the transfer of files. Appellants also agree that VCR type devices may transmit video. However, the problem with the prior art (as described above) rests in the fact that to

exchange/share video files in the prior art, bulky video tapes must be transported. The final Office Action asserts that WebTV™ is a set top box that is essentially a general purpose computer with a tuner. Appellants respectfully disagree. Under the Examiner's own definition of WebTV™ set forth in the final Office Action, WebTV is a system that allows access to the web and can send and receive email on a television by means of a set top box. Such limited capabilities do not equate WebTV to a general purpose computer with a tuner. As stated above, the PocketTV article provides that the HP Jornada device receives MPEG videos (i.e., videos compressed in accordance with a particular format). Such compression is performed by a PC. The HP Jornada user guide further reinforces communication with a PC having such capabilities. On the other hand, the WebTV™ device fails to provide any such compression capabilities. The final Office Action has not cited any art whatsoever that shows such capabilities in a WebTV device. Accordingly, the WebTV device of Perlman cannot be used in the manner asserted in the final Office Action.

The final Office Action asserts that since Perlman is a central hub and supports communication to the Internet, that MPEG clip transmission to a set top box is taught. Appellants submit that there is no support for such a conclusion. Nowhere in Perlman or PocketTV or the other cited references is there any suggestion for a set top box to transmit an MPEG clip. Accordingly, not only does the art fail to teach the limitations as claimed, but it is not possible to use the PocketTV teaching with the Perlman teaching.

The final Office Action responds to the incompatibility between PocketTV and Perlman as follows:

As to the assertion that the PocketTV device is incapable of being used with an STB, the examiner respectfully disagrees. As aforementioned, the instant application defines the usage of the term "set top box" as referring to any device capable of receiving program information signals (IA: Page 10, line 23 - Page 11, Line 4). The art of record clearly illustrates that the interconnection of a PDA with a STB was previously envisioned. The Wharton et al. reference was merely referenced as support in response to applicant's arguments of hindsight that the interconnection of a PDA and a STB was not within the level of ordinary skill in the art. Perlman teaches that the central electronic device or "set top box" (40) is operable to interconnect any consumer electronic device. As is explicitly taught by Perlman, such devices are not limited to the interconnection of large standard entertainment unit systems, rather the reference explicitly discloses that "consumer electronic device" or electronic device" as used therein refer to any number or type of various consumer electronic devices that provide audio output, video output, or information services or can be connected to a television set (Col 6, Lines 43-54). Such devices include personal computers and VCRs. The PocketTV™ article disclose the existence of palm-sized personal computer that also acts as a miniature VCR and is clearly within the scope of the Perlman reference as it provides audio output, video output, or information services. Accordingly, it is the examiner's position that the Perlman



reference provides an adequate nexus or suggestion so as to interconnect a consumer electronic device such as a palm-sized PC or PDA with a set-top terminal. This connection advantageously enables the user of the Perlman system with a portable storage device.

Appellants respectfully disagree and traverse these assertions. Firstly, the claims explicitly provide that the STB has specific capabilities. In this regard, the STB must be capable of receiving audio/visual information from a hand-held computing device and displaying such received information on an output device. Thus, consistent with the definition in the specification, the STB has particular explicitly claimed limitations. Such claim limitations cannot merely be ignored in favor of a general definition set forth in the specification.

In addition, while Perlman teaches a central electronic device to interconnect any consumer electronic device, Perlman completely fails to even remotely suggest that such a consumer electronic device includes a handheld computing device with the limitations as claimed. Instead, the only examples set forth in Perlman for such consumer electronic devices are those devices included in home entertainment or information retrieval systems (see col. 6, lines 43-45). Thus, rather than Perlman's devices including any and all devices known, such devices do not include handheld computing devices. The final Office Action submits that such devices include personal computers and VCRs. As stated above, the hand held computing device is neither a personal computer nor a VCR. Further, PocketTV's PDA is not even remotely similar to a VCR within the scope of Perlman. Perlman's devices refer to large VCRs that are plugged into a television as is known in the art and not to hand held computing devices. Further, as stated above, PocketTV's PDA lacks the functionality of the hand held computing device having the claimed limitations.

In view of the above, Appellants submit that Perlman clearly fails to provide an adequate nexus or suggestion to use PocketTV's PDA device.

A Response to Arguments section of a prior Office Action asserts that the features upon which Appellant relies are not recited in the rejected claims. Further, the final Office Action submits:

In reference to applicant's arguments pursuant to non-claimed limitations, as is well known in the art and further disclosed in the Perlman (US Pat No. 6,530,085) reference, of record, which is incorporated by reference in its entirety by the Perlman ('879) reference, the "set top box" is operable to receive MPEG encoded video (Perlman ('085): Col 19, Lines 20-64) for storage on a digital storage device. Such a teaching provides further evidence that the combination is not inoperative. Finally, applicant's further arguments that the article is limited to an MPEG encoder associated with a PC further weaken the assertion that the PocketTV device is capable of being used with an STB in view

of the personal computer / "set top box" [118] of Schindler et al. which discloses the particular usage of both.

Appellants respectfully traverse the above. Firstly, the use of Perlman '085 is improper. The Perlman '085 reference has not been used to reject the claims under 35 USC 103. Thus, it is unclear if the Perlman '085 reference is being formally relied upon to reject the claims or not.

In addition, Appellants note that Perlman's consumer electronic devices specifically are devices that can be connected to a television set (see col. 6, lines 41-46). Further, the context of such devices that can be connected to a television set are limited to those that can be connected via various cables (see col. 1, line 57-col. 2, line 52; FIGS. 1-4). While Perlman '085 does disclose MPEG, the transmission of such MPEG to a handheld device is not even remotely contemplated (i.e., by either Perlman '085 or '879). Again, there would be no need (nor is there a motivation) to connect the PocketTV device to Perlman's device. Instead, Perlman's central hub is specifically used for connecting large home entertainment devices via cable. In this regard, there is no mention in Perlman to connect a handheld computing device that is capable of storing audio/visual information. Instead, Perlman uses the device/central hub itself to store the information (see col. 19, lines 20-64 and FIG. 18). Alternatively, Perlman provides for storing the information on an analog VCR (see col. 19, lines 61-64). Again, such a use is contrary and teaches away from that of the present invention.

In addition to the above, even if Perlman could be extended to use with a PDA device (which Appellants traverse), the PocketTV device cannot be used with a WebTV device. In this regard, as stated above, the PocketTV article teaches away from a use with any system other than a personal computer.

The Office Action relies on the teaching of Huang for controlling one or more STBs using the command signal. While Huang discloses a remote control system via a PDA (see col. 4, lines 62-66 and Title), Huang still fails to cure the deficiencies of Perlman, PocketTV, and the HP User Guide as described above. Specifically, Huang is limited to the user of a PDA as a remote control to control consumer electronics devices (see col. 4, line 66-col. 5, line 1). However, Huang still fails to teach the receiving or transmitting of audio/visual information from a handheld device to an STB as claimed. Further, none of the cited references even remotely describe an STB that is capable of

displaying audio/visual information on a display where that audio/visual information was received from a handheld computing device (as claimed).

In addition to the above, Appellants submit that since Perlman fails to disclose any type of handheld computing device, one cannot read in the "hand held computing device" or "PDA" of the present invention or the PocketTV article into Perlman.

The final office Action further states that a change in size is generally recognized as being within the level of ordinary skill in the art and that the PocketTV article provides a physical actualization of what has been previously been held as an obvious variant of the Perlman VCR in disclosing software that enables a PDA to become a miniature VCR that is inherently capable of transmitting information between it and a computer. Appellant respectfully disagrees. As stated above, the PocketTV article is merely a press release from a company that is touting their device. The press release merely advertises that your handheld or palm-size PC becomes a miniature VCR. Again, there is no functional or enabling description that supports such an assertion in the press release. Instead, the press release consistently asserts that the handheld or palm-size PC merely has the capability to play movie files encoded in the standard MPEG-1 format. In fact, the article places the reference to the miniature "VCR" in quotes as a statement by Tristan Savatier, President of MpegTV. Such a quote is not even remotely equivalent to an enabling disclosure or the teaching of the present invention. In addition, Appellant submits that the PocketTV article does not merely reduce the size of Perlman's VCR. Instead, PocketTV presents a device that merely has one feature of a VCR – the ability to playback a video.

In view of the above, Appellant respectfully traverses the rejections and asserts that the current claims are novel and nonobvious in view of the cited references.

Independent claim 47 provides similar limitations to that described with respect to claim 35 and Appellants traverse the rejections of claim 47 for a similar rationale.

B. Dependent Claim 48 Is Patentable Over Perlman in view of PocketTV and further in view of Huang

Dependent claim 48 further provides that a first and second handheld devices are different devices. These claims were rejected as follows:

Claims 47 and 48 are rejected as previously set forth in the rejection of claim 35. The aforementioned combined references do not explicitly disclose the particularly claimed scenario wherein a "first of one or more hand held computing devices" is operable to interact with a STB (Claim 47) such that "the first hand held computing device and second hand held computing device are different handheld computing devices". In response to the examiner's previous objection pertaining to the drawings failing to illustrate such a scenario utilizing multiple "handheld computing devices" in conjunction with a single "set top box", the applicant admits that such a scenario is a "conventional feature" and as such need not be shown in the Figures (Paper 10, Page 7). Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention that the aforementioned combined teachings of Perlman would be operable to utilize both a "first" and a "second handheld computing device" that are different for the purposes of enabling a viewer to transport and share media with another user with a similar configuration.

Appellant respectfully traverses the above rejection. Appellant previously addressed drawing objections with support in the specification. Appellants note that with respect to drawing rejections, 37 CFR 1.83(a) provides that conventional features "disclosed in the description and claims, where their detailed illustration is not essential for proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or labeled representation (e.g., a labeled rectangular box". The dictionary (<http://dictionary.reference.com/search?q=conventional>) defines the term "conventional as follows:

*con ven tion al adj.*

1. Based on or in accordance with general agreement, use, or practice; customary: *conventional symbols; a conventional form of address.*
2. Conforming to established practice or accepted standards; traditional: *a conventional church wedding.*
  - a. Devoted to or bound by conventions to the point of artificiality; ceremonious.
  - b. Unimaginative; conformist: *longed to escape from their conventional, bourgeois lives.*
3. Represented, as in a work of art, in simplified or abstract form.
4. ~~Law~~ Based on consent or agreement; contractual.
5. Of, relating to, or resembling an assembly.
6. Using means other than nuclear weapons or energy: *conventional warfare; conventional power plants*

Thus, contrary to that suggested by the Examiner, the term conventional does not mean described in the prior art or admitted in the prior art. Appellant has not admitted nor suggested that the use of different handheld computing devices in the context of the claimed invention was in the prior art or admitted in the prior art. Instead, Appellant provided that the claimed scenarios (wherein different hand held computing devices are used) contained conventional features that were described in the specification and claims.

The specification and claims described a scenario wherein a handheld computing device communicated with compatible STBs and wherein the STBs communicated with multiple

compatible handheld computing devices. In that the drawings illustrate an STB and a hand held computing device and the specification describes multiple compatible handheld computing devices, it would be based on or in accordance with general agreement (i.e., the definition for "conventional") that the handheld computing device illustrated is an example of the various different handheld computing devices that could be compatible with the STB. Thus, the drawings clearly provide support for the claimed invention. Further, Appellant has never stated that the claimed limitations would be obvious in view of the prior art. Thus, Appellant traverses the rejections and response set forth in the Final Office Action.

In view of these previously submitted arguments, the rejections to the drawings were withdrawn. In addition, the final Office Action addresses the above arguments as follows:

With respect to applicant's arguments pertaining to claims 47 and 48, it is the examiner's understanding that these arguments were previously addressed in the Final Rejection of 27 September 2004. As to the applicant's remarks that the ability to share and distribute media between users with a similar configure of home entertainment system only being advantageously pursuant to the present invention, the examiner respectfully disagrees. For example, as noted in applicant's admitted prior art, it is well established that owners of compatible entertainment systems comprising VCRs are operable to share and distribute media (IA: Page 3, Lines 3-12) for the inherent advantages associated with doing so. Furthermore, the examiner has no basis by which conclude that users with identical configurations to those taught by the combined references would be precluded or not have a reasonable chance of success so as to share media between devices. For example, if user disconnected the VCR [130] of Perlman with its associated memory and reconnected it at a friend's house (in place of the identical configuration VCR), there is not teaching or suggestion that the replacement VCR with its associated recorded media would not serve to operate in an identical fashion to subsequently playback the previously recorded media. Furthermore, the HP Jordana 430/430se device inherently supports the capability to transfer/receive information between itself and multiple computing devices whereupon the user can view the transferred information on the monitor of a local computing device.

Appellants traverse the above assertions. Specifically, Appellants submit that the combination of the cited references is only available in view of impermissible hindsight offered by the present invention. The Examiner submits that there is no basis to conclude that users with identical configurations to those taught by the combined references would be precluded or not have a reasonable chance of success so as to share media between devices.

However, it is not Appellant's obligation to disprove that a reference has or does not have any characteristics that would prevent it from being combined with another reference. Instead, under MPEP 2143, it is the Examiner's obligation to set forth a prima facie case of obviousness. As part of establishing the case, the Examiner must meet three criteria: he must show that some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of

ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *In re Vack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Thus, instead of determining whether there is a basis to conclude that the combined references would be precluded or not have a chance of reasonable success, as part of Patent Office's obligation to establish a prima facie case, the Patent Office must show there to be a reasonable expectation of success. The lack of the ability to disprove success is clearly insufficient to meet such a burden.

As stated above, Appellant submits that the combination of the references is not possible, is not suggested, and would produce an inoperable result. Instead of relying on the art itself to teach the expectation of success, the Final Rejection relies on conjecture without any support. Namely, the final Office Action states that "For example, if user disconnected the VCR [130] of Perlman with its associated memory and reconnected it at a friend's house (in place of the identical configuration VCR), there is no teaching or suggestion that the replacement VCR with its associated recorded media would not serve to operate in an identical fashion to subsequently playback the previously recorded medial." However, regardless of whether such a statement is true or not, such a statement still fails to teach the communication between the claimed handheld computing device (having the various claimed functionality) combined with the STB device (having the various claimed functionality). Again, a VCR being disconnected and replaced with a different VCR is not even remotely equivalent to two different handheld computing devices that communicate with an STB and the ability to receive audio/visual information from a handheld computing device that is different from a handheld computing device that information was transmitted to (as claimed).

C. Dependent Claims 36, 37, 58, and 59 Are Patentable Over Perlman in view of PocketTV and further in view of Huang AND are Patentable Over Schindler in view of PocketTV and further in view of Huang

The Office Action rejects claims 36, 37, 58, and 59 (under Perlman) as follows:

In consideration of claims 36, 37, 58, and 59, it is known in the art that viewers share recorded media. The combined disclose the use of a portable "handheld computing device" in which a viewer may take recorded media along with them. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention that various scenarios for the purpose of sharing and distributing media between users with a similar configuration of home entertainment systems. For example, one of ordinary skill in the art would recognize that given multiple home entertainment systems that a user might record information on their "handheld computer device" for storage and playback on the "same" STB for the purpose of presenting such information using a larger display screen than that associated with the PDA. Similarly, in conjunction with the sharing of media, a user of a "handheld computer device" may subsequently share or distribute the media to a "different" STB associated with a friend for the purposes of sharing and viewing the recorded media on a larger display screen associated with a different location.

Similar rejections were made under Schindler.

Appellant respectfully traverses such rejections. For the reasons stated above, the combination of the cited references fails to disclose the use of a portable "handheld computing device" in which a viewer may take recorded media along with them". Appellant also appreciates the Examiner's recognition of the benefits of the present invention of the ability to share and distribute media between users with a similar configuration of home entertainment systems. However, such advantages are only possible pursuant to the present invention. To use these advantages which are not even remotely contemplated or described in the cited art as a rationale for obviousness is improper. Such a reliance on the advantages uses impermissible hindsight. In this regard, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The rejection relies on Appellant's disclosure and the benefits of Appellant's invention as a rationale for combining the references and to illustrate a reasonable expectation of success.

In addition to the above, Appellants reassert the arguments above set forth with respect to claim 48.

D. Dependent Claims 38, 49, and 60 Are Patentable Over Perlman in view of PocketTV and further in view of Huang AND Over Schindler in view of PocketTV and further in view of Huang

These claims provide for the use of a single button that causes multiple events to occur.

Namely, the command causes (1) audio/visual information to be transmitted from the hand held computing device to the STB; and (2) the transmitted audio/visual information to be displayed on the output device.

In rejecting these claims, the Final Office Action relies on Perlman and Schindler and merely states that a play button in PocketTV would cause such actions to occur. Appellant respectfully traverses such an assertion. A play button on a VCR would cause a VCR to play a tape and the output of the VCR would transmit via cable to a television. In accordance with Perlman, such a transmission would proceed from the VCR to the central electronics device and then to the television. However, as stated above, Perlman's VCR is not equivalent to the claimed handheld computing device.

The final Office Action submits that the PocketTV article fulfills the limitations relating to a VCR. For the reasons stated above, Appellants submit that PocketTV does not teach a handheld computing device with full VCR capabilities that may include those set forth in the present claims. Again, PocketTV does not teach the transmission of anything pursuant to the depression of a single button on PocketTV's PDA device. Further, there is no discussion that the depression of a single button on PocketTV's PDA device would cause information to be transmitted and displayed. Instead, the Office Action is relying on impermissible hindsight and conjecture in evaluating the claims.

F. Dependent Claims 39 and 61 Are Patentable Over Perlman in view of PocketTV and further in view of Huang AND Over Schindler in view of PocketTV and further in view of Huang

Dependent claims 39 and 61 provide that the audio/visual information is stored on the hand held computing device in encrypted form (see page 11, lines 20-page 12, line 24).

In rejecting these claims, the final Office Action merely states:

...it would have been obvious to one having ordinary skill in the art at the time of the invention to store the audio/visual information on the "handheld computing device in encrypted form" for the purpose of limiting the distribution and subsequent playback of the record media to individuals per the media terms of use.

Appellant respectfully traverses the above assertions. Firstly, the rejection lacks a reference



to any cited prior art for such a "purpose". Secondly, Appellant submits that the storage of audio/visual information in encrypted form is not and has not been disclosed by the cited references. The PocketTV article completely fails to provide any reason for storing information in encrypted form. Instead, PocketTV explicitly teaches the storage of non-encrypted data:

Basically MPEG is to video what MP3 is to music. It is an open, non-proprietary, non-encrypted format...

Thus, contrary to that asserted in the final Office Action, PocketTV teaches away from the storage of encrypted content as set forth in these claims.

F. Dependent Claims 40, 50, and 62 Are Patentable Over Perlman in view of PocketTV and further in view of Huang AND Over Schindler in view of PocketTV and further in view of Huang

These claims provide that the communication between the handheld computing device (i.e., the audio/visual information) is via wireless transmission. The final Office Action relies on Huang to teach these claim elements. However, Huang merely teaches the infrared transmission of coding schemes that act as a remote control (see col. Lines 15-21). In this regard, Huang completely fails to teach, describe or suggest, the transmission of information more than remote control codes (e.g., the claimed audio/visual information). In addition, PocketTV fails to teach communication between an STB and handheld computing device as described above.

G. Dependent Claims 41, 51, and 63 Are Not Separately Argued

H. Dependent Claims 42, 52, and 64 Are Patentable Over Perlman in view of PocketTV and further in view of Huang

Dependent claims 42, 52, and 64 provide for a VCR that is incorporated into an STB. Further, the claims provide that the hand held computing device is configured to control such a VCR (see page 11, lines 5-11).

In rejecting these claims, the final Office Action relies on Perlman '085 that allegedly teaches an incorporated video cassette recorder in col. 19, lines 46-64. Appellant traverses such an assertion.

Col. 19, lines 45-64 provide:

In one embodiment of the present invention, it is envisioned that the video and audio information provided to video processor 284 may be saved for later viewing or listening. Thus, video processor 284 may provide digital and audio information 288 to storage device 290 for storage and later retrieval and playback. Storage device 290 may be any type of storage device commonly used in either the consumer electronics or computer industries. Digital video and audio information 288 may be provided in any format suitable to the embodiment of the particular invention, as for example MPEG or other digital format. Occasionally, it will be desirable to match the video and audio format of 288 to the particular storage device used. Thus, if storage device 290 is a digital video tape, then it may be desirable to provide the information in a format compatible with the digital video tape. In the alternative, another format may also be used that is not traditionally associated with the particular storage device, as for example digital audio and video information being recorded on an analog VCR.

As can be seen from the above cited text, there is no disclosure, implicit or explicit of incorporating a VCR into a STB. Instead, the cited text teaches away from such an implementation by stating that data may be converted for recording onto an analog VCR. Such a teaching clearly illustrates Perlman's desire not to incorporate the VCR into the STB as set forth in the present claims.

I. Dependent Claims 43, 53, and 65 Are Patentable Over Perlman in view of PocketTV and further in view of Huang AND Over Schindler in view of PocketTV and further in view of Huang

Dependent claims 43, 53, and 65 provide that the STB is configured to filter out desirable information from the broadcast audio/visual information for transmission and storage on the hand held computing device (see page 9, lines 10-14; page 12, lines 23-24).

In rejecting these claims, the final Office Action admits the combined references do not teach the claimed elements. Instead, the final Office Action relies on obviousness and merely states that since a Palm-sized device can only store 64 MB of memory, it would be obvious to filter out desirable information from the broadcast audio/visual information.

Appellant submits that such an illogical leap is wholly without merit. There would be a number of ways to condense the data to store on limited memory. For example, the data could be compressed. Such compression is consistent with the PocketTV article which states "MPEG files are highly compressed". Further, the claims provide that the STB filters out the information from the broadcast information. Nowhere in any of the cited references is there any description of an STB, or central electronics device that performs such filtering. In addition, the claims provide for

the transmission of the filtered content from the STB to the hand held computing device. Again, none of the references even remotely allude to such a transmission of filtered content.

J. Dependent Claims 44, 54, and 66 Are Not Separately Argued

K. Dependent Claims 45, 55, and 67 Are Patentable Over Perlman in view of PocketTV and further in view of Huang AND Over Schindler in view of PocketTV and further in view of Huang

Dependent claims 45, 55, and 67 provide that the audio/visual information is only transmitted from the STB to the hand held computing device when an amount of the audio/visual information exceeds a threshold (see page 9, lines 26-30).

In rejecting these claims, the final Office Action (under both Perlman and Schindler) provides:

In consideration of claims 45, 55, and 67, the "audio/visual information" is "transmitted from one of the STBs to the handheld computing device only when an amount of the audio/visual information exceeds a threshold" such that information is only transmitted when information is available. Alternatively, given that the embodiment is operable to communicate via both "wireless" and "wired" means, it would have been obvious to one having ordinary skill in the art that information would be transmitted via the "wired" means if the data rate exceeds 100 Mbit/sec since such a transfer rate is not supported in conjunction with wireless distribution as taught by the PocketTV article.

Appellant does not understand what the rejection is asserting. Firstly, the rejection added "such that information is only transmitted when information is available" to the claim language. Such language is not present in the rejected claims. Instead, as claimed, once the amount of information exceeds a threshold, the information is transmitted. In this regard, the availability of the information is not suggested by the claim language. Additionally, the rate of transmission of information is not relevant with respect to the claim language. Again, the claims address when the amount of information exceeds a threshold without any reference to a transfer rate.

In view of the above, Appellant asserts that the Patent Office has failed to establish a prima facie case of nonobviousness with respect to these claims.

L. Dependent Claims 46, 56, and 68 Are Not Separately Argued

M. The Independent Claims Are Patentable Over Schindler in view of PocketTV and further in view of Huang

Appellant respectfully traverses the rejections based on Schindler in view of PocketTV and Huang. Like Perlman, Schindler merely describes a home entertainment system. Further, like Perlman, Schindler completely fails to describe the communication between a handheld computing device and a set top box as claimed. In fact, the Office Action admits such a lack of teaching "The reference, however, does not explicitly disclose the particular usage of a 'handheld computing device' to be used in conjunction with the embodiment for the receiving and transmitting material to/for a computer." Appellant stated above that the PocketTV article and HP Jornada reference were limited to the transmission of information to and from a computer.

In addition, as described above, the PocketTV article and HP Jornada reference completely fail to teach, disclose, or suggest, implicitly or explicitly, the transmission of audio/visual information from the handheld computing device to an STB for display on a display device controlled by the STB. Instead, the PocketTV article is exclusively used to display video on the PocketTV device. In other words, the PocketTV article describes a "TV" that is "Pocket" size. There is neither reason nor rationale for the PocketTV device to send information to an STB for display on another output device. Such a rationale/reasoning only arises via the description of the present invention.

In view of the above, while HP Jornada provides for transmitting files to a computer, the transmission of audio/visual files for display on an output device controlled by an STB is not even remotely contemplated or described by HP Jornada. Further, consistent with such an analysis, there would be no reason or rationale to use the HP Jornada device to transmit or receive audio/visual files with Schindler's system. In this regard, there is no motivation to combine Schindler with either HP Jornada or PocketTV.

The motivation provided in the Office Action again recites the same advantage as indicated above - allowing the storage of an entire movie in your pocket. Again, such an advantage exists regardless of whether PocketTV is combined with another reference or not. Further, the advantage of carrying an entire movie in your pocket does not even remotely suggest the motivation for

transmitting that movie to an STB for display on an output device. The advantage for storing an entire movie in your pocket as reflected in the PocketTV article is so that you can easily carry and then view the movie on the PocketTV device. Again, there is no description, implicit or explicit, for transmitting that movie to an STB for display on an output device.

The final Office Action continues and asserts that another motivation is to provide a means for presenting information using a larger display screen for the commonly known advantage of providing the PDA user with a more easily viewable image when the PDA is interconnected to the "set top box" based upon a higher screen resolution and/or enabling easier viewing for additional/multiple user so as to share viewing the recorded content given the larger screen image. Appellant submits that the result of presenting a larger image when a PDA is connected to a set top box is beneficial. However, relying on the benefits of the invention in hindsight as a motivation to combine the references is improper. Neither reference discloses or states such a motivation anywhere in the references. Nor does the Office Action state that such a motivation is common knowledge in the art.

In response to the above arguments, the final Office Action submits:

The examiner is unaware of where in the specification the particular benefits of transferring information from a smaller screen computing device to a larger screen are explicitly set forth. It is the examiner's presumption that the benefits are implicit or inherent to interconnection of a handheld computing device, a STB, and a display monitor. Accordingly, such a motivation would equally apply to the examiner's combination of a handheld computing device with a STB. Additionally, the particular motivation or advantages associated with displaying an image from a small screen handheld computing device to a larger screen is common knowledge as clearly evidenced by the art of record as was previously addressed in the Final Rejection of 27 September 2004. Furthermore, the HP Jornada 430/430se device inherently supports the capability to transfer/receive information between itself and multiple computing devices whereupon the user can view the transferred information on the monitor of a local computing device. In order to accept the position that PocketTV™ article with its associated platform the HP Jornada 430/430se is limited to only being capable of providing the ability to carry a movie in your pocket begs the question as to how the device received the downloaded movie in the first place. The Schindler et al. personal computer provides a means so as to download this information and the particular portable nature of the PocketTV™ article advantageously allows users of the Schindler et al. system with a means for portability of the recorded media which would not otherwise be realized using the illustrated system configuration. Accordingly, it is the examiner's opinion that adequate motivation so as to utilize a PDA with a personal computer/ "set top box" [118] has been provided and does not believe it to be unreasonable to conclude that the particular combination of references as set forth would not be capable of providing the ability to display the image onto the larger screen.

Appellant respectfully traverses the above assertions. With respect to the motivation for displaying a movie on a larger screen. The present invention provides the motivation for

transmitting audio/visual information from a PDA to a set top box for display on an output device such as a television or larger screen (see page 5, lines 11-23; page 13, lines 14-27; page 14, line 29- page 15, line 4). Only with the teaching of the present invention would someone realize the benefits of such capabilities. Nowhere in any of the cited references has there been any suggestion or description of such benefits or capabilities. Instead, the examiner presumes that such benefits are inherent or implicit when a handheld computing device, STB, and display monitor are connected. Again, in the prior art, PDAs were mere used as remote controls and not in the manner or context set forth in the present specification and claims. In other words, the connection of a handheld computing device to a STB and a display monitor was not indicated nor suggested in the prior art. Accordingly, Appellant submits that such benefits are not inherent or implicit. Further, without the present invention, there would be no motivation to connect a PDA, television, and STB in the manner set forth in the claims.

With respect to the inherent support in the HP Jornada device – the HP Jornada device does provide for transferring information to/from a PC as described above. However, the Patent Office states that it “begs the question as to how the device received the downloaded movie in the first place”. Appellant submits that there is no question in this regard - the HP Jornada device received the movie from a PC (personal computer) (as stated above). However, the HP Jornada device did not receive the movie from a STB as set forth in the claims. Further, the HP Jornada device does not and cannot transmit the movie to an STB for display on a display device (as claimed).

Schindler also fails to provide such a teaching. In this regard, Schindler lacks any teaching or suggestion, explicit or implicit, of a connection between a handheld computing device and an STB as claimed. The Patent Office repeats the usefulness of the portability of recorded media. However, as stated above, the portability of the recorded media exists without Schindler and such portability still lacks the motivation to combine PocketTV with Schindler or the user of a handheld computing device to store and transmit audio/visual information to/from a STB as claimed.

Appellant further submits that contrary to that asserted by the Examiner, there is a complete lack of adequate motivation to combine Schindler with PocketTV. Further, the combination still fails to teach the invention as claimed.

In addition to the above, Appellant submits that the invention must be viewed as a whole. MPEP 2141.01 provides: In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). The Office Action is failing to look at the invention as a whole and is instead improperly breaking up the various claim limitations and attempting to apply art to individual aspects without regard to the links between the claim elements and the "whole" invention. In this regard, the invention as a whole provides for the use of a handheld computing device to transmit audio/visual information to a STB that then displays the received information on an output device. Such a sequence and combination of events is not contemplated, suggested, described, or alluded to by the cited references.

In response to the above arguments, the final Office Action submits:

The Schindler et al. reference discloses the particular usage of a personal computer that serves as both a hub for interconnected A/V devices and a set top box (Figure 1) and is operable to display received signals on a large monitor. Applicant's have conceded that the PocketTV™ with its associated platform the HP Jordana 403/430se are interconnectable with a computer. As such, it is the examiner's opinion that the usage of a personal computer [118] which generates MPEG1 encoded signals with a PocketTV™ device, which by its very nature, is designed to be interconnected with a computer and requires the usage of MPEG1 encoded signals for local display is not unreasonable. The remaining question is whether or not the combination would further facilitate the transfer of information from the small screen handheld device and the larger screen associated with the computer. Given that the HP Jordana 430/430se is inherently capable of supporting the transfer and subsequent display of files onto a larger screen device such as that associated with a personal computer and given that the particular display of the stored material from a handheld computing device with a small screen to a larger screen and the particular advantages for doing so are common knowledge, it is the examiner's position that it is not unreasonable to conclude that taken in combination the references as a whole meet the claimed invention taken as a whole.

Appellants respectfully traverse the above assertions. Again, as admitted in the final Office Action, Schindler completely lacks any suggestion for connecting a handheld computing device in the manner set forth in the claims. The Examiner is relying on a benefit of transferring information from a small screen handheld device to a larger screen associated with a computer. However, nowhere is such a benefit even remotely alluded to in the cited art. Appellant reasserts that such a benefit of displaying a movie stored in a handheld device on a larger television would only be available after reading Appellant's specification.

The final Office Action asserts that the HP Jordana device is inherently capable of supporting the transfer to a larger screen device and that particular advantages thereby are common knowledge. Appellant respectfully disagrees and traverses such an assertion. Nowhere in the cited art is there any description, hint, or suggestion that the HP Jordana device is inherently capable of supporting the transfer to a larger screen. Instead, the Patent Office is relying on the personal opinion and conjecture of the Examiner. Appellant submits that there is no foundation or support in the field of invention or with one of ordinary skill in the art for such an assertion.

In addition, with respect to evaluating the invention as a whole, all of the various components that work together as a unit must be taken into consideration when evaluating the claims. In this regard, the connection and use of the STB with the handheld device, wherein both the STB and handheld computing device have various features, must be considered when evaluating the claims. The final Office Action fails to consider each of these aspects as a whole when evaluating and rejecting the claims.

In view of the above, Appellants respectfully request reversal of the rejections.

N. Dependent Claim 48 Is Patentable Over Schindler in view of PocketTV and further in view of Huang

With respect to claim 48, Appellant reasserts the arguments from above.

The final Office Action also states:

Alternatively, it is well known in the art that viewers desire to share recorded media for a number of reasons. The combined references articles suggest the use of a portable "handheld computing device" in which a viewer may take a recorded media along with them. One of ordinary skill in the art would recognize that multiple home entertainment systems of the combined references may exist and meet the claimed limitations wherein the "first" and "second handheld computing devices" are "different". Feasibly a viewer with a "first hand held computing device" may "receive audio/visual information" that is "transmitted" to a "first handheld computing device" and "stored". The viewer's friend may own a "second handheld computing device" that "receives" and "stores" a different program. Over afternoon tea, the second viewer may talk about the program that he/she watched last night. Presuming that the first viewer has not viewed the program, the second viewer having ordinary skill in the art and being a polite conversationalist may offer to share the contents of the "second handheld computing device". One having ordinary skill in the art would subsequently recognize that it would be advantageous to plug the "second handheld computing device" into the first users home entertainment system such it "receives" and "provides the audio/visual information from the second hand held computing device" to an "output device" [122] such as a television set for the purpose of advantageously providing the video display on a larger screen that is easier to view so as to share the program with the second user.



Appellant submits that the above scenario is very nice. However, it has no foundation in the prior art and is not admitted or within the ordinary skill in the art. People talking over tea about what would be useful has no merit. The fact that a user may like to plug his device into a home entertainment system to show audio/visual information stored therein, where no art shows the capability to perform such a connection and display, cannot be used to reject the present claims. In this regard, hypothetical desires and dreams of a user have no foundation in the prior art. Further, the ability to perform such tasks is merely present in view of the present invention. Such use again relies on impermissible hindsight.

In view of the above, Appellants respectfully request reversal of the rejections.

O. Dependent Claims 42, 52, and 64 Are Patentable Over Schindler in view of PocketTV and further in view of Huang

These claims provide that a VCR is incorporated into the STB. In rejecting these claims, the final Office Action alleges that Schindler col. 10, lines 52-54 teaches the incorporated VCR. Col. 10, lines 52-54 provide:

Tape drive 330 is preferably an 8 millimeter tape device, and is useful for storing entire programs of data or MPEG compressed video/audio information.

As can be seen from this text, there is not suggestion, implicit or explicit, to incorporate a VCR into an STB. Instead, the cited text (and the remainder of Schindler) merely refers to a tape drive and not a VCR. Further, Schindler's FIG. 1 actually illustrates a VCR [172] that is completely separable from the personal computer system [118] and is not incorporated in the personal computer [118]. Thus, contrary to that asserted in the final Office Action, Schindler completely fails to teach or suggest and actually teaches away from incorporating a VCR into an STB as claimed.

P. Dependent Claims 43, 53, and 65 Are Patentable Over Schindler in view of PocketTV and further in view of Huang

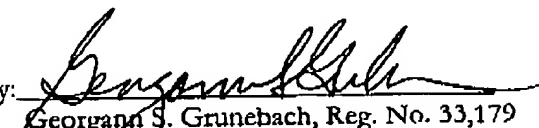
Q. Dependent Claims 45, 55, and 67 Are Patentable Over Schindler in view of PocketTV and further in view of Huang

R. Conclusion

In light of the above arguments, Appellants respectfully submit that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellants' claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103. As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

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## APPENDIX

### 1-34. (CANCELED)

35. A system of displaying audio/visual information on an output device using a set top box and a hand held computing device to store the audio/visual information and control the set top box, the system comprising:

- (a) two or more set top boxes (STBs) for controlling a display of audio/visual information, wherein each STB is configured to:
  - (i) receive broadcast audio/visual information;
  - (ii) transmit audio/visual information to a hand held computing device;
  - (iii) receive audio/visual information from the hand held computing device;
  - (iv) transform the audio/visual information received from the hand held computing device to a form suitable for presentation on an output device; and
  - (v) cause the transformed audio/visual information to be displayed on the output device;
- (b) the hand held computing device configured to:
  - (i) receive a user command from a user;
  - (ii) translate the user command into a command signal;
  - (iii) control one or more of the STBs using the command signal;
  - (iv) receive audio/visual information from a first STB;
  - (v) store the received audio/visual information;
  - (vi) transmit the stored audio/visual information to a second STB for display on the output device.

36. The system of claim 35, wherein the first STB and second STB are the same.

37. The system of claim 35, wherein the first STB and second STB are different STBs.

38. The system of claim 35, wherein:

- (a) the user command comprises a depression of a single button on the hand held computing device; and

- (b) the user command causes:
  - (i) the transmission of the audio/visual information from the hand held computing device to the second STB; and
  - (ii) the second STB to playback the audio/visual information on the output device.

39. The system of claim 35, wherein the audio/visual information is stored on the hand held computing device in encrypted form.

40. The system of claim 35, wherein the hand held computing device communicates with one or more of the STBs via a wireless transmission.

41. The system of claim 35, wherein the hand held computing device communicates with one or more of the STBs via a wired connection.

42. The system of claim 35, wherein the hand held computing device is further configured to control a video cassette recorder that is incorporated into one or more of the STBs.

43. The system of claim 35, wherein the one or more of the STBs are configured to filter out desirable information from the broadcast audio/visual information for transmission and storage on the hand held computing device.

44. The system of claim 35, wherein the audio/visual information is transmitted from one of the STBs to the handheld computing device over a constant periodic interval.

45. The system of claim 35, wherein the audio/visual information is transmitted from one of the STBs to the handheld computing device only when an amount of the audio/visual information exceeds a threshold.

46. The system of claim 35, wherein the audio/visual information is transmitted from one of the STBs to the handheld computing device when requested by the hand held computing device.

47. A set top box (STB) used for displaying audio/visual information on an output device, wherein the STB is configured to:

- (a) control a display of audio/visual information on an output device;
- (b) receive broadcast audio/visual information;
- (c) transmit audio/visual information to a first of one or more hand held computing

devices, wherein each of the one or more handheld computing devices is configured to:

- (i) receive a user command from a user;
- (ii) translate the user command into a command signal;
- (iii) control the STB using the command signal;
- (iv) receive audio/visual information from the STB;
- (v) store the received audio/visual information; and
- (vi) transmit the stored audio/visual information to the STB for display on the

output device;

- (d) respond to the command signal;
- (e) receive audio/visual information from a second hand held computing device;
- (f) transform the audio/visual information received from the first or second hand held computing devices to a form suitable for presentation on an output device; and
- (g) cause the transformed audio/visual information to be displayed on the output device.

48. The STB of claim 47, wherein the first hand held computing device and second hand held computing device are different hand held computing devices.

49. The STB of claim 47, wherein:

- (a) the user command comprises a depression of a single button on the second hand held computing device; and
- (b) the user command causes:
  - (i) the transmission of the audio/visual information from the second hand held computing device to the STB; and
  - (ii) the STB to playback the audio/visual information on the output device.

50. The STB of claim 47, wherein the STB communicates with the one or more hand held computing devices via a wireless transmission.

51. The STB of claim 47, wherein the STB communicates with the one or more hand held computing devices via a wired connection.

52. The STB of claim 47, wherein:  
a video cassette recorder (VCR) is incorporated into the STB; and  
the VCR is controlled by the hand held computing device.

53. The STB of claim 47, wherein the STB is configured to filter out desirable information from the broadcast audio/visual information for transmission and storage on the hand held computing device.

54. The STB of claim 47, wherein the audio/visual information is transmitted from the STB to the first handheld computing device over a constant periodic interval.

55. The STB of claim 47, wherein the audio/visual information is transmitted from the STB to the first handheld computing device only when an amount of the audio/visual information exceeds a threshold.

56. The STB of claim 47, wherein the audio/visual information is transmitted from the STB to the first handheld computing device when requested by the first hand held computing device.

57. A handheld computing device used for displaying audio/visual information on an output device through a set top box, wherein the handheld computing device is configured to:

- (a) receive a user command from a user;
- (b) translate the user command into a command signal;
- (c) control two or more set top boxes (STBs) using the command signal, wherein each of the STBs is configured to:
  - (i) receive broadcast audio/visual information;

- (ii) transmit audio/visual information to the hand held computing device;
  - (iii) receive audio/visual information from the hand held computing device;
  - (iv) transform the audio/visual information received from the hand held computing device to a form suitable for presentation on an output device; and
  - (v) cause the transformed audio/visual information to be displayed on the output device;
- (d) receive audio/visual information from a first STB;
  - (e) store the received audio/visual information;
  - (f) transmit the stored audio/visual information to a second STB for display on the output device.

58. The handheld computing device of claim 57, wherein the first STB and second STB are the same.

59. The handheld computing device of claim 57, wherein the first STB and second STB are different STBs.

60. The handheld computing device of claim 57, wherein:
- (a) the user command comprises a depression of a single button on the hand held computing device; and
  - (b) the user command causes:
    - (i) the transmission of the audio/visual information from the hand held computing device to the second STB; and
    - (ii) the second STB to playback the audio/visual information on the output device.

61. The handheld computing device of claim 57, wherein the audio/visual information is stored on the hand held computing device in encrypted form.

62. The handheld computing device of claim 57, wherein the hand held computing device communicates with one or more of the STBs via a wireless transmission.

63. The handheld computing device of claim 57, wherein the hand held computing device communicates with one or more of the STBs via a wired connection.

64. The handheld computing device of claim 57, wherein the hand held computing device is further configured to control a video cassette recorder that is incorporated into one or more of the STBs.

65. The handheld computing device of claim 57, wherein the one or more of the STBs are configured to filter out desirable information from the broadcast audio/visual information for transmission and storage on the hand held computing device.

66. The handheld computing device of claim 57, wherein the audio/visual information is received in the handheld computing device from one of the STBs over a constant periodic interval.

67. The handheld computing device of claim 57, wherein the audio/visual information is received in the handheld computing device from one of the STBs only when an amount of the audio/visual information exceeds a threshold.

68. The handheld computing device of claim 57, wherein the audio/visual information is received in the handheld computing device from one of the STBs when requested by the hand held computing device.